

### REMARKS

For the sole reason of addressing non-substantive formalities issues, claims 1-14 have been cancelled without prejudice, and claims 15-25 have been added. No new matter has been added by virtue of the amendments. For instance, support for the new claims appears in the original claims of the application.

Applicants submit herewith a Supplemental Sequence Listing Submission responsive to the Notice to Comply with Sequence Disclosures.

Applicants also submit herewith certified copies of the priority applications of the present case, i.e. European applications 97116863.8, 97122471.2 and 98104216.1.

Claims 1 and 2 were objected to under 37 CFR 1.821(d) for not reciting SEQ ID NOS. in the claims.

The new claims recite SEQ ID NOS. as appropriate. Accordingly, it is believed the objection should be withdrawn.

Claims 4, 9 and 12 were objected to under 37 CFR 1.75 (c) with respect to form of multiple dependencies.

The claims pending herein have proper multiple dependent form. Thus, the objection is believed to be obviated.

Claims 1-4 and 9 were rejected under 35 U.S.C. 101 on grounds that those claims do not distinguish products of nature. The rejection is traversed.

The claims recite a truncated material. Such a material is not subject to rejection under Section 101.

In the Office Action, it is stated that "[t]he amino-terminally truncated MCP-2 as claimed has the same characteristics and utility as found in MCP-2 produced by various cells, and therefore does not constitute statutory subject matter."

Respectfully, Section 101 does not require differences in characteristics or utility from natural material.

In view thereof, withdrawal of the rejection is requested.

Claims 1-2, 4, 9 and 12 were rejected under 35 U.S.C. 112, second paragraph for formalities-type matters.

It is believed the amendments made herein obviate the rejection.

Specifically, it is believed objection to recitation of "residues 1, 1-2, 1-3, 1-4 or 1-5 of the naturally occurring MCP-2" and "naturally-occurring" is obviated by the addition to SEQ ID NOS. The new claims also have proper antecedent basis.

Claims-1-4, 9 and 12 were rejected under 35 U.S.C.102 over Proost et al. (J. Immunol. 1998; 160: 4034-4041).

The cited document has a date well after Applicants' priority dates. As indicated above, certified copies of the priority documents are enclosed herewith.

Claims 1-2, 4, 9 and 12 were rejected under 35 U.S.C. 102(e) over Rollins et al. (U.S. Patent 5,739,103). The rejection is traversed.

The entire thrust of the Rollins documents is directed to certain *MCP-1* compounds, and clearly not to MCP-2 compounds. See columns 4 through 11 of Rollins et al. All the examples of Rollins et al. are limited to MCP-1.

Nowhere does Rollins et al. report manipulation or other use of MCP-2.

Indeed, nowhere does Rollins report or otherwise suggest amino-terminally truncated MCP-2 that lack NH<sub>2</sub>-terminal amino acids corresponding to amino acid residues 1, 1-2, 1-3, 1-4 or 1-5 of naturally-occurring MCP-2 and having chemokine antagonistic activity, as Applicants disclose and claim.

In view thereof, the rejection should be withdrawn. See *In re Marshall*, 198 USPQ 344, 346 (CCPA 1978) ("[r]ejections under 35 U.S.C. 102 are proper only when the claimed subject matter is identically disclosed or described in the prior art.").

Claims 1-4, 9 and 12 were rejected under 35 U.S.C. 103 over Van Damme et al. (J. Expo. Med, 1992: 176: 59-65) in view of Gong et al. (J. Biol. Chem. 1996; 271: 10521-10527), and further in view of Van Collie (Biochemie Biophys. Res. Com. 1997; 231: 726-730).

In the Office Action, it is specifically acknowledged that the primary citation of Van Damme et al. does not report truncated MCP-2 compounds of any type.

Gong is cited for certain MCP-1 compounds. Van Collie is cited for a report that there are two alleles of MCP-2. It has not been established that Van Collie has a publication date before the priority date of the present application.

The rejection is traversed.

The cited documents, whether considered alone or in combination, clearly provide no suggestion of Applicants' claimed invention.

Indeed, the rejection is based on a quite extended extrapolation of the cited documents, with no support anywhere for such extrapolation.

For instance, the following statements are made at page 7 of the Office Action to substantiate the rejection:

Given the teachings of Van Damme et al. that MCP-2 is a structural and functional equivalent of MCP-1, the ordinary artisan at the time the invention was made would have been motivated to apply the approach used by Gong et al. to develop MCP-1 antagonists to also develop antagonistic amino acid terminal truncations of MCP-2.

Since both MCP-2 and MCP-1 recruit monocytes which are important in a variety of inflammatory conditions; the ordinary artisan at the time the invention was made would have been motivated to produce and screen multiple amino-terminal truncations of MCP-2 in order to identify an antagonist of MCP-2 that could be substituted or combined with antagonists of MCP-1 to better identify monocyte recruitment in those conditions.

Nowhere is it suggested to modify MCP-2 as proposed in the Office Action and set forth immediately above. Hence, the rejection can not be sustained. See Section 2143.03 of the Manual of Patent Examining Procedure ("To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.").

Indeed, none of the cited documents suggest MCP-2 that lack NH<sub>2</sub>-terminal amino acids corresponding to amino acid residues 1, 1-2, 1-3, 1-4 or 1-5 of the naturally-occurring MCP-2 and having chemokine antagonistic activity as Applicants disclose and claim. In this regard, attention is directed to the examples of the application, which demonstrate activity of the claimed MCP-2 compounds that lack NH<sub>2</sub>-terminal amino acids.

In view thereof, reconsideration and withdrawal of the rejection are requested.

It is believed the application is in condition for immediate allowance, which action is earnestly solicited.

Respectfully submitted,



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**VERSION MARKED TO SHOW CHANGES**

**IN THE CLAIMS:**

Claims 1-14 are cancelled without prejudice.

The following new claims are added.

15. An amino-terminally truncated MCP-2 lacking NH<sub>2</sub>-terminal amino acids corresponding to amino acid residues 1, 1-2, 1-3, 1-4 or 1-5 of naturally-occurring MCP-2 (SEQ ID NO: 2) and having chemokine antagonistic activity.

16. The truncated MCP-2 of claim 15, wherein the truncated MCP-2 lacks NH<sub>2</sub>-terminal amino acids corresponding to amino acid residues 1-5 of naturally-occurring MCP-2 (SEQ ID NO: 2).

17. The truncated MCP-2 of claim 15, wherein the truncated MCP-2 has the amino acid sequence of SEQ ID NO: 4.

18. The truncated MCP-2 of claim 15, wherein the truncated MCP-2 has the amino acid sequence of SEQ ID NO: 5.

19. The truncated MCP-2 of claim 15, wherein the truncated MCP-2 lacks NH<sub>2</sub>-terminal amino acids corresponding to amino acid residue 1 of naturally-occurring MCP-2 (SEQ ID NO: 2).

20. The truncated MCP-2 of claim 15, wherein the truncated MCP-2 lacks NH<sub>2</sub>-terminal amino acids corresponding to amino acid residues 1-2 of naturally-occurring MCP-2 (SEQ ID NO: 2).

21. The truncated MCP-2 of claim 15, wherein the truncated MCP-2 lacks NH<sub>2</sub>-terminal amino acids corresponding to amino acid residues 1-3 of naturally-occurring MCP-2 (SEQ ID NO: 2).

22. The truncated MCP-2 of claim 15, wherein the truncated MCP-2 lacks NH<sub>2</sub>-terminal amino acids corresponding to amino acid residues 1-4 of naturally-occurring MCP-2 (SEQ ID NO: 2).

23. The truncated MCP-2 of any one of claims 15 through 22, wherein the truncated MCP-2 is in glycosylated form.

24. A pharmaceutical composition comprising a truncated MCP-2 of any one of claims 15 through 22 and one or more pharmaceutically acceptable carriers and/or excipients.

25. A pharmaceutical composition comprising a truncated MCP-2 of claim 23 and one or more pharmaceutically acceptable carriers and/or excipients.